

## CLAIMS

1           1. A dual function reader device, comprising:  
2           a housing, including a handle disposed at one end of said housing and including at one  
3           trigger disposed along said handle;  
4           a radio frequency (RF) antenna disposed along said housing;  
5           an optical bar code scanner circuit disposed within said housing;  
6           a RF transceiver disposed within said housing; and  
7           a processing circuit coupled to said antenna, to said RF transceiver and to said scanner  
8           circuit;  
9           wherein a data read signal is generated by said reader after a successful optical read  
10          operation is completed; and  
11          wherein said processing circuit forms a RF transmission signal after receiving said data  
12          read signal.

1           2. The device of claim 1, further including a tether attached to said device housing.

1           3. The device of claim 1, further comprising a battery pack disposed within said  
2          housing, said battery pack being electrically coupled to said processing circuit and to said  
3          transceiver.

1           4. The device of claim 1, further comprising a data entry device disposed on said  
2          device housing, said data entry device being coupled to said processing circuit.

1           5. The device of claim 1, wherein said transceiver is enabled to transmit said  
2 transmission signal after said data read signal is received by said RF transceiver.

1           6. The device of claim 1, further comprising an automatic backup circuit which  
2 automatically enables said transceiver if no data read signal is generated a predetermined period  
3 of time after said scanner circuit attempts to read an optical bar code.

1           7. The device of claim 1, wherein said processing circuit includes a manual  
2 selection function which causes either said transceiver or said scanner circuit to be enabled.

1           8. The device of claim 6, wherein said automatic backup circuit is disabled if said  
2 device is not coupled to an external power source.

1           9. The device of claim 1, wherein said data read signal is generated by said scanner  
2 circuit after said scanner circuit receives uncorrupted data from an optical bar code.

1           10. A location indicating bar code label, comprising:

2           a bar code label which includes a bar code pattern printed on said label;

3           an indicator light disposed on said bar code label; and

4           a power source coupled to said indicator light;

5           wherein said power source is coupled to said indicator light.

1           11. The label of claim 10, further comprising a light sensor coupled to said indicator  
2           light.

1           12. The label of claim 10, wherein said indicator light is illuminated when said bar  
2           code label is scanned by a light source having a predetermined frequency.

1           13. A radio frequency (RF) responsive device for temporarily storing articles of  
2           commerce, comprising:

3           a carrier unit;  
4           a RF transponder device disposed on said carrier unit; wherein  
5           an optical bar code disposed on said carrier unit;  
6           said transponder device includes a data sequence regarding goods stored by said carrier  
7           unit.

1           14. The device of claim 13, further comprising a low-powered radio disposed on  
2           said carrier unit.

1           15. The device of claim 14, wherein said radio periodically wakes up and transmits a  
2           status message.

1           16. The device of claim 13, wherein said transponder data sequence includes at least

2 one data set selected from the following group of data sets: the source of said carrier unit, the  
3 destination of said carrier unit, the source of the goods stored by the carrier unit, the destination  
4 of goods stored by said carrier unit, an inventory of goods stored by said carrier unit, the shelf-  
5 life of goods stored by said carrier unit, the current temperature of goods stored by said carrier  
6 unit, a preferred storage temperature for goods stored by said carrier unit, biological sensor data  
7 for goods stored by said carrier unit, and pressure sensor data for said carrier unit.

1 10 9 8 7 6 5 4 3 2 1 0  
1 17. The device of claim 13, wherein said carrier unit comprises a railroad car.

1 18. The device of claim 13, wherein said carrier unit comprises a shipping container.

1 19. The device of claim 13, wherein said carrier unit comprises a shipping pallet.

1 20. The device of claim 13, wherein said carrier unit comprises a truck trailer.

1 21. A dual mode article identification system for goods stored by a carrier unit,  
2 comprising:

3 a dual mode reader device;

4 a temporary carrier unit for storing articles of commerce;

5 an optical bar code disposed on said temporary carrier unit;

6 a radio frequency (RF) transponder device disposed on said temporary carrier unit; and

7 a plurality of goods stored by said temporary carrier unit;

8           wherein said reader device reads said optical bar code and communicates with said RF  
9           transponder device.

1           22.     The system of claim 21, wherein said reader device includes an optical scanner  
2           portion and a RF transceiver portion.

1           23.     The system of claim 21, further comprising an indicator light disposed on said  
2           carrier unit in close proximity to said optical bar code.

1           24.     The system of claim 21, further comprising a biological sensor device for  
2           sensing biological activity for said goods.

1           25.     The system of claim 21, further comprising a pressure sensor for sensing  
2           pressure exerted on said carrier unit.

1           26.     The system of claim 21, further comprising a sensor for providing status data to  
2           said RF transponder device.

1           27.     A method of communicating between a reader device and a carrier unit, wherein  
2           said carrier unit includes a plurality of goods stored therewith, includes an optical bar code  
3           disposed thereon, and includes a radio frequency RF transponder device disposed thereon, and  
4           wherein said reader device includes an optical bar code scanner and a RF transceiver, said

5       method comprising the steps of:  
6             optically scanning said optical bar code using said reader device;  
7             establishing RF communication between said reader device and said RF transponder  
8       device; and  
9             delivering status information from said carrier unit to said reader device.

1             28. The method of claim 27, wherein said status information comprises status  
2       information for said plurality of goods.

1             29. The method of claim 27, further comprising the step of transmitting status  
2       information from said reader unit to said carrier unit.

1             30. The method of claim 27, wherein said status information comprises status  
2       information for said carrier unit.

1             31. The method of claim 27, further comprising the step of transmitting at least one  
2       location detection signal for geographically locating said carrier unit.

1             32. The method of claim 27, further comprising the step of communicating with said  
2       RF transponder via a base station.